

Title (en)

METHOD FOR ASSEMBLING MOTORIZED VALVE, AND MOTORIZED VALVE

Title (de)

VERFAHREN ZUM ZUSAMMENBAU EINES MOTORISIERTEN VENTILS UND MOTORISIERTES VENTIL

Title (fr)

PROCÉDÉ D'ASSEMBLAGE D'UNE VANNE MOTORISÉE, ET VANNE MOTORISÉE

Publication

EP 3828452 A4 20220427 (EN)

Application

EP 19840786 A 20190523

Priority

- JP 2018137505 A 20180723
- JP 2019020376 W 20190523

Abstract (en)

[origin: EP3828452A1] Provided are a method for assembling a motor-operated valve capable of allowing an excitation magnetic pole of a stator coil and a predetermined magnetic pole of a rotor to be arranged exactly directly opposite each other when a movable stopper collides with a fixed stopper, thereby accurately performing both the alignment of the magnetic poles and the base point determination without requiring strict management of a guide bush or the like, and the motor-operated valve. The method includes rotating a bottom stopper base body 25 so that a collision-contact plane Ja of a fixed stopper 24 is located on a particular straight line C passing through the axis O of rotation as seen in a top view, fixing the bottom stopper base body 25 to an immobile portion on the side of a valve body 40, screwing a valve stem holder 30 onto a guide bush 20 to allow a valve element 14 to be seated on a valve seat 46 and further rotating the valve stem holder 30 in the direction to close the valve to allow a movable stopper 34 to collide with the fixed stopper 24, rotating the valve stem holder 30 in the direction to close the valve or the direction to open the valve by a predetermined amount based on the screw amount of the valve stem holder 30 with respect to the guide bush 20 when the movable stopper 34 has collided with the fixed stopper 24 and thus moving the valve stem holder 30 to the position where the valve stem holder 30 should be finally located with respect to a valve stem 10 when the movable stopper 34 collides with the fixed stopper 24, and fixing a fixture 70 to the valve stem 10.

IPC 8 full level

F16K 31/04 (2006.01); **F16K 31/50** (2006.01)

CPC (source: EP)

F16K 27/029 (2013.01); **F16K 31/04** (2013.01); **F16K 31/504** (2013.01); **F16K 2200/40** (2021.08); **F25B 41/35** (2021.01); **Y02B 30/70** (2013.01)

Citation (search report)

- [XDA] JP 2016217451 A 20161222 - FUJI KOKI KK
- [AD] JP 5697909 B2 20150408
- See references of WO 2020021836A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3828452 A1 20210602; EP 3828452 A4 20220427; EP 3828452 B1 20230329; CN 112469936 A 20210309; CN 112469936 B 20221206; JP 2020016247 A 20200130; JP 6945860 B2 20211006; WO 2020021836 A1 20200130

DOCDB simple family (application)

EP 19840786 A 20190523; CN 201980048528 A 20190523; JP 2018137505 A 20180723; JP 2019020376 W 20190523